STATE OF NEW HAMPSHIRE

Department of Environmental Services
Air Resources Division

This summary is intended to assist interested stakeholders in understanding the changes that have been made to the RTAP rules in the past few years. **This summary does not replace the rules**. Persons subject to regulation under the RTAP rules are responsible for complying with the rules. In the event of any conflict between this summary and the rules, the rules will control.

Changes to Env-A 1400, *Regulated Toxic Air Pollutants* Adopted November 2009

In accordance with RSA 125 I, and Env-A 1411.03, DES updates the list of RTAPs annually. Due to the numerous changes proposed this year, the Department has decided to re-adopt the rule now rather than wait. The Department is required to re-adopt rules every 8 years or they expire, and Env-A 1400 was last adopted in February, 2005.

Based on changes made to the list of chemical substances by the American Conference of Governmental Industrial Hygienists (ACGIH) and as required by RSA 125-I:4, the Department has adopted amendments based on ACGIH changes made in 2007 and 2008. The 2008 changes were published as work on the 2007 changes was being completed, so it was decided to address both this year.

1. The following eight compounds are new RTAPs as a result of addition of TLV values by ACGIH:

1-Methyl naphthalene [90-12-0]	5-Nitro-o-toluidine [99-55-8]
2-Methyl naphthalene [91-57-6]	Dimethyl disulfide [75-18-3]
Hexafluoropropylene [116-15-4]	Alachlor, inhalable fraction and vapor [15972-60-8]
Isobutene [115-11-7]	Polyvinyl chloride (PVC) [9002-86-2]

2. The TLV's for the following ten substances were removed by ACGIH, and have been delisted by DES:

Triphenyl amine [603-34-9]	Emery [1302-74-5]
Calcium carbonate [471-34-1]	Silica, crystalline Tripoli [1317-95-9]
Aluminum oxide [1344-28-1]	Alkyls as Al [7429-90-5]
Pyro powders as Al [7429-90-5]	Soluble salts as Al [7429-90-5]
Welding fumes as Al [7429-90-5]	Welding fumes (not other wise classified) [0-00-0]

3. Two substances were either combined or expanded by ACGIH.

   - Iodine was expanded to inhalable fraction and vapors, and includes iodides [7553-56-2];
   - Aluminum and compounds, as Al have been reduced to Aluminum metal and insoluble compounds [7429-90-5].

4. AALs have been derived for Dimethyl carbamoyl chloride (DMCC) [79-44-7], which has been on the RTAP list with no regulatory limits.

5. Thirty-five RTAPs have had "inhalable fraction and vapor" added to their description. This notation was appended to the compound in ACGIH to indicate that the compound can exist in both vapor and particle form, with each form contributing to the health impact.

6. The AALs for the following RTAPs have decreased based on a change in TLV's by ACGIH:

Aldrin [309-00-2]
Diglycidyl ether [2238-07-5]
Ethyl amyl ketone [541-85-5]
n-Propanol [71-23-8]
Toluene [108-88-3]
Benomyl [17804-35-2]
Hydroquinone [123-31-9]
Natural rubber latex [9006-04-6]
1,1,1,2-Tetrachloro-2,2-difluoroethane [76-11-9]
1,1,1,2-Tetrachloro-2,2-difluoroethane [76-12-0]
Arsine [7784-42-1]
3,5-Dinitro-o-tolumide [148-01-6]
Methyl demeton [8002-00-2]
Tetraethyl pyrophosphate [107-49-3]
Trichloroethylene [79-01-6]
Carbaryl [63-25-2]
Indene [95-13-6]
Trimellitic anhydride [552-30-7]
Thiram [137-26-8]

7. The Department has removed the following 19 compounds since harmful levels of these can only exist in confined areas and not in the ambient air. Most of these compounds would only reach unhealthful levels near or at the LEL (lower explosive level).

Carbon black [1333-86-4]
Cotton dust [0-00-0]
Sucrose [57-50-1]
Starch & Starch (dust) [9005-25-9 & 9005-28-8]
Cellulose [9004-34-6]
Flour dust [0-00-0]
Portland cement [65997-15-1]
Ethane (see Aliphatic hydrocarbon gases) [74-84-0]
Butane (see Aliphatic hydrocarbon gases) [106-97-8]
Isobutane (see Aliphatic hydrocarbon gases) [75-28-5]
Propane (see Aliphatic hydrocarbon gases) [74-98-6]
Liquefied propane gas (LPG) (see Aliphatic hydrocarbon gases) [74-98-6]
Aliphatic hydrocarbon gases C1-C4 (measured as butane) [0-00-0]
Natural gas (see Aliphatic hydrocarbon gases) [8006-14-2]
Diesel fuel (as total hydrocarbons) (fuel oils #2) [68476-30-2]
Diesel fuel (as total hydrocarbons) (fuel oil #4) [68476-31-3]
Diesel fuel (as total hydrocarbons) (diesel #2) [68476-34-6]
Diesel fuel (as total hydrocarbons) (diesel #4, marine diesel) [77650-28-3]
Diesel fuel (as total hydrocarbons) (diesel oil) [68334-30-5]

8. The Department has expanded the list of exempt devices and fuels to include:

- Propane [74-98-6];
- Biomass, along with an expanded definition within the rule ("Biomass" means "biomass" as defined in RSA 125-C:2, III-a, namely "organic material used as a fuel, not including wood derived from construction

and demolition debris, as defined in RSA 149-M:4, IV-a; wood which has been chemically treated; or agricultural crops or aquatic plants or byproducts from such crops or plants, which have been used to rehabilitate a contaminated or brownfields site through a process known as 'phytoremediation.' " The term also does not include any mixture containing the wood component of C&D or any material or mixture containing sewage sludge, industrial sludge, medical waste, hazardous waste, household or municipal waste, animal or human remains, animal or human waste, or radioactive waste.);

- ASTM specification B20 [20% biofuel mixed with 80% virgin fuel oil] to be combusted in an external combustion device;
- Waste water evaporators which do not process wastewater containing volatile organic compounds;
- Waste oil heaters which meet certain specified criteria;
- Particulate removal efficiencies for filters in spray booths can be used in determining compliance and not be considered a control device, if the coating operations demonstrate compliance with 40 CFR Part 63 subpart HHHHHH, §63.11173(e)(2)(i); and
- Non-metallic mineral process in plants.

9. Section 1405.03 (de minimis level method) and 1405.05 (adjusted in-stack method) have added language only allowing their use if the stack is vertical and unobstructed. The facility can still use the in-stack, and ambient air modeling methods to demonstrate compliance.

10. Section Env-A 1405.05 – The factors used to calculate the adjusted in-stack concentration have been revised based on the current US EPA ambient air impact model. The new impact modeling derived two dilution factors than can be used to determine the adjusted in-stack concentration based on distance of the process or device from the compliance boundary.

    - For facilities where the edge of the building housing the process or device is <40 ft from the compliance boundary, a factor of 250 is used as the denominator;
    - For facilities where the edge of the building housing the process or device is >40 ft from the compliance boundary, a factor of 700 is used as the denominator.

11. Section Env-A 1410.03 and 1410.04 – the factor used to calculate the 24-hour and annual de minimis values have been lowered based on the new US EPA ambient air model. The change in this factor had the affect of increasing both the 24-hour and annual de minimis levels for 99% all RTAPs.

12. Section Env-A 1403.01 was edited to clarify when a permit is required.